

TO COMPLETE W/O 93657 (WAS COSTEC)

Work Order ID 134113

134113

Thursday, July 02, 2015 11:41:37 AM

Item ID: D2711 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Lock Pin
Start Date: 7/02/15 Start Qty: 43.00 *43* Cust Item ID:
Required Date: 7/17/15 Req'd Qty: 43.00 *43* Customer:
Reference:

Approvals: Process Plan: H Date: 15.7.2 Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2711	Rev A

130	HAAS CNC Vertical Machining FLOW WATER JET	0.00				41	2		DAS 08 9-89
130									
Waterjet		0.00							
FLOW CNC Waterjet	Memo 1-Cut as per Dwg D2711 Dwg Rev: <u>A</u> Prog Rev: <u>AA</u> 2-Deburr if necessary								
HAAS 1									
140	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
140									
QC	Memo	0.00							
Quality Control									

(41)

AUG 18 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>134113</u> Part No. <u>D2711</u> NCR No. _____		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date: <u>15/07/27</u>		Step #: <u>130</u>		QTY Effective: <u>2</u>		MRB (QS1042) Approval DAS 9 9-89 <u>15.08.13</u>			
Description Work Order Deviation				Disposition		Completed By <u>D.A. 15/07/27</u>			
ø0.125" hole was originally cut on waterjet resulting being very hard to get a good part estetically and within tolerance. → Switched process to CNC milling and tried using the jig as is using a .125" endmill. For the first part, hole was in tolerance but bottom of pin had a chunk of scale missing. → Made a new jig with a 1/4" ballmill to support around hole but same results. → 3rd attempt → Hole is now machined half way down then flipped 180° then machine the other half = good part				→ New process is now fool proof and safe → Scrap n destroy / no replace		Lead hand / Supervisor Approval Verification <u>15.08.14</u>			
						QC / QA Coordinator DAS Approval 9 9-89 <u>15.08.13</u>			
Root Cause				FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☒ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ ✓ Product Improvement ☐ ✓ Process Improvement ☐ ✓ Manufacturing Process ☐ Past Due ☐				Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ ✓ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER: _____									

Work Order ID 134113***134113***

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Thursday, July 02, 2015 11:41:37 AM

Item ID: D2711 Accept ***N900040100*** Setup Start ***NS1***
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Start Date: 7/02/15 Start Qty: 43.00 ***4.3*** Cust Item ID:
Required Date: 7/17/15 Req'd Qty: 43.00 ***4.3*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150	Outsource process-Cadplate per QSI017 4.1.9.1	0.00							
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150									
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Outsource3	Memo	0.00							
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Outsource process - Cad plate	Issue P/O: <u>29547</u> Cad plating								
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155	Receive & Inspect for Damage & Mat'l Certs	0.00							
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155									
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Packaging	Memo	0.00							
-----------	------	------	--	--	--	--	--	--	--

Packaging									
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160	QC5- Inspect part completeness to step on W/O	0.00							
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160									
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QC	Memo	0.00							
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Quality Control									
-----------------	--	--	--	--	--	--	--	--	--

DAS 6 41
9-89 AUG 2 1 2015

(44)
DAS 38
9-89 AUG 3 1 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Required Date: 7/17/15 Req'd Qty: 43.00 ***4.3*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Identify as per dwg & Stock Location: <u>548</u>	0.00				41			
170							SEP 01 2015		
Packaging	Memo	0.00					27		
Packaging							9-89		
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

ms SEP 14 2015
CMF
15-9-24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 93657

93657

Page 1

November-22-12 1:33:56 PM

Item ID: D2711

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Lock Pin

Start Date: 21/11/2012 Start Qty: 60.00

60

Cust Item ID:

Required Date: 20/12/2012 Req'd Qty: 60.00

60

Customer:

Reference:

Approvals: Process Plan: *MLJ*

Date: *12-11-22* Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2711

Rev A

100

0.00

100

PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: *18488* Purchase Part Number: PNT-9 LOCK PIN Supplier:
Reids Tools Certificate of conformity is required

CX 12/11/23 60

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

Ensure certificate of conformity is attached

43 SP 12-12-28

120

QC5- Inspect part completeness to step on W/O

0.00

120

QC

Memo

0.00

Quality Control

DAS 16 13/02/02

Conts (43)

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data ☐											
Equip/Tooling ☐											
Operator ☐											
Material ☐											
Setup ☐											
Other ☐											
Process ☐											
Supplier ☐											
Training ☐											
Unapproved ☐											
FAULT CATEGORY											
Landing Gear ☐ Bending ☐ Centre Not Concentric to O/S ☐ Cracks ☐ Crushed/Crimped. ☐ Cuffs ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Ripples in Bend ☐ Torque Waves in Extrusion ☐ Turning Sequence ☐ Wave/Twist in Tube			General ☐ Bend ☐ BOM/Route ☐ Broken/Damaged ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drill Holes ☐ Drawing ☐ Finish ☐ Folio			☐ Grain ☐ Hardware ☐ Inspection Incomplete ☐ Instructions Incomplete/Unclear ☐ Maintenance ☐ Mislabeled ☐ Misread ☐ Offset ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions			☐ Ovalized ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge		☐ Pressure/Forced ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

Work Order ID 93657

November-22-12 1:33:56 PM

93657

Page 2

Item ID: D2711

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Lock Pin

Start Date: 21/11/2012 Start Qty: 60.00

60

Cust Item ID:

Required Date: 20/12/2012 Req'd Qty: 60.00

60

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

FLOW WATER JET

0.00

130

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D2711 Dwg Rev: _____ Prog Rev: _____ 2-
Deburr if necessary

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.00

Quality Control

150

Outsource process-Cadplate per QSI017 4.1.9.1

0.00

150

Outsource3

Memo

0.00

Outsource process - Cad plate

Issue P/O: _____ Cad plating

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
☐ Bending	☐ Bend	☐ Grain
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete
☐ Crushed/Crimped.	☐ Burrs	☐ Instructions Incomplete/Unclear
☐ Cuffs	☐ Contamination	☐ Maintenance
☐ Heat Treat	☐ Countersink	☐ Mislabelled
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread
☐ Ripples in Bend	☐ Drill Holes	☐ Offset
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration
☐ Turning Sequence	☐ Finish	☐ Out of Sequence
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions
		☐ Ovalized
		☐ Over/Under tolerance
		☐ Part Incorrect
		☐ Part Lost/Missing
		☐ Part Moved
		☐ Positioned Wrong
		☐ Power Loss/Surge
		☐ Pressure/Forced
		☐ Temperature/Cure
		☐ Weld
		☐ Wrong Stock Pulled
		☐ Other

93657

Page 3

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

60

60

Customer:

Reference:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

[illegible]

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector			
Doc/Data ☐												
Equip/Tooling ☐												
Operator ☐												
Material ☐												
Setup ☐												
Other ☐												
Process ☐												
Supplier ☐												
Training ☐												
Unapproved ☐												
FAULT CATEGORY												
Landing Gear ☐ Bending ☐ Centre Not Concentric to O/S ☐ Cracks ☐ Crushed/Crimped. ☐ Cuffs ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Ripples in Bend ☐ Torque Waves in Extrusion ☐ Turning Sequence ☐ Wave/Twist in Tube			General ☐ Bend ☐ BOM/Route ☐ Broken/Damaged ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drill Holes ☐ Drawing ☐ Finish ☐ Folio			☐ Grain ☐ Hardware ☐ Inspection Incomplete ☐ Instructions Incomplete/Unclear ☐ Maintenance ☐ Mislabeled ☐ Misread ☐ Offset ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions			☐ Ovalized ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge		☐ Pressure/Forced ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other	

Picklist Print

November-22-12 1:33:59 PM

Page 1

Work Order ID: 93657

93657

Parent Item: D2711

D2711

Parent Item Name: Lock Pin

Start Date: 21/11/2012

Required Date: 20/12/2012

Start Qty: 60.00

Required Qty: 60.00

Comments:

IPP B 99.11.04Re-formatEC

IPP Rev:C Added Purchasing 07-03-21 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
PNT-9		Purchased	No			110	Each	5.0000	1	60			

PNT-9

Lock Pin

43 SP12-12-28.

Location

Loc Qty

Loc Code

Mezz

5

8280

5

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

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Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

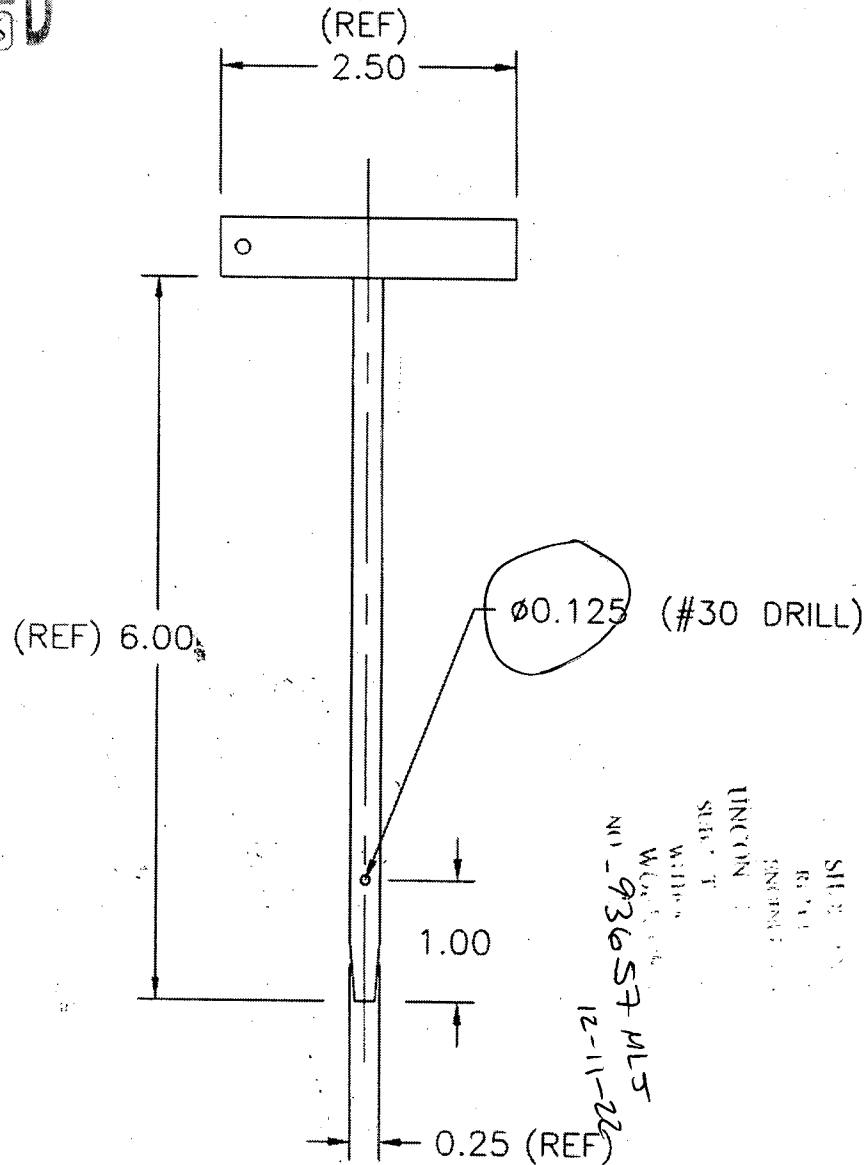
FAULT CATEGORY

Landing Gear	General	Other
☐ Bending	☐ Bend	☐ Grain
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear
☐ Cuffs	☐ Contamination	☐ Maintenance
☐ Heat Treat	☐ Countersink	☐ Misread
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Offset
☐ Ripples in Bend	☐ Drill Holes	☐ Out of Calibration
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Sequence
☐ Turning Sequence	☐ Finish	☐ Outside Dimensions
☐ Wave/Twist in Tube	☐ Folio	
		☐ Ovalized
		☐ Over/Under tolerance
		☐ Part Incorrect
		☐ Part Lost/Missing
		☐ Part Moved
		☐ Positioned Wrong
		☐ Power Loss/Surge
		☐ Pressure/Forced
		☐ Temperature/Cure
		☐ Weld
		☐ Wrong Stock Pulled
		☐ Other



DESIGN <i>max</i>	DRAWN BY <i>max</i>	DART AEROSPACE LTD. VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED BY <i>max</i>	APPROVED <i>max</i>	DRAWING NO. D2711	REV. A SHEET 1 OF 1
DATE 97.11.03		TITLE LOCK PIN	SCALE NTS
A	97.11.03	NEW ISSUE	

RELEASED
97/11/06 DS



MAKE FROM REID TOOL SUPPLY PART # PNT-9
FINISH: CAD PLATE



A Reid Entities Company

2265 Black Creek Rd * Muskegon * MI * 49444-2684
Phone: 800.253.0421 * Email: sales@reidsupply.com
Fax: 800.438.1145 * Web: ReidSupply.com



* 4 6 1 4 1 7 0 *

P.O. # PO18488

Shipper No 04614170-1

Page 1 of 1

Bill To: DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Canada

Ship To: DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Canada

Phone

Attn:

Customer No	Your P.O. No	Sched Date	Ship Via	Ship Date	Shipper No
215650	PO18488	11/26/12	FED-EX INTL PRIOR 3RD PTY	12/26/12	04614170-1

Line	Order Qty	Item	Description	Qty Shipped	Back Order
1		43 PNT-9	T-PIN .250 X 6	43	0
		812/01/02	P/O: PO18488	HS Tariff Code:	820750
				Country of Origin:	United States
			17 pcs in stock, balance due to Reid 12-17-12.	3.84	165.12

Thank you for your order. Items in stock will ship today.

Value in US Funds: 165.12

Terms: Net 30 Days

Total Number of items: 1

Estimated Weight: 6 lb 15.80 oz 3.172 kg

Opr: ERH Branch: 11 SLSM: REID

Picker:

Sp12-12-28.

All sales of products or services by Reid Supply Company are made subject to the Terms and Conditions of Sale, incorporated by reference and available at ReidSupply.com or by calling 231.777.3951
If Buyer has not otherwise agreed to those terms, then Buyers acceptance of delivery of and/or payment for the products or services will constitute buyer's acceptance of the Terms and Conditions of Sale.

CERTIFICATION OF COMPLIANCE
Reid Supply Company

States the above material purchased was supplied in accordance with the description as illustrated in our catalog and our website.

THANK YOU VERY MUCH FOR YOUR ORDER

Packing List

Cathy Reid Document Control Supervisor

Packing List

North American Free Trade Agreement Certificate of Origin

Please Print or Type

Shipper Number: 04614170-1

Page 1 of 1

1. EXPORTER NAME AND ADDRESS: Reid Supply Company 2265 Black Creek Rd Muskegon, MI 49444 Tax Identification Number: 45-3087774				2. BLANKET PERIOD (MM/DD/YR) FROM: 12/26/12 TO: 01/09/13			
3. PRODUCER NAME AND ADDRESS AVAILABLE TO CUSTOMS UPON REQUEST Tax Identification Number:				4. IMPORTER NAME AND ADDRESS: DART AEROSPACE 1270 ABERDEEN ST HAWKESBURY, ON K6A 1K7 Canada Tax Identification Number:			
5. DESCRIPTION OF GOODS:		6. H.S. TARIFF CLASSIFICATION NUMBER	7. PREFERENCES CRITERION	8. PRODUCER	9. NET COST	10. COUNTRY OF ORIGIN	
PNT-9	T-PIN .250 X 6	820750	B	NO2	NO	USA	
I CERTIFY THAT: • THE INFORMATION ON THIS DOCUMENT IS TRUE AND ACCURATE AND I ASSUME THE RESPONSIBILITY FOR PROVING SUCH REPRESENTATIONS. I UNDERSTAND THAT I AM LIABLE FOR ANY FALSE STATEMENTS OR MATERIAL OR OMISSIONS MADE ON OR IN CONNECTION WITH THIS DOCUMENT; • I AGREE TO MAINTAIN, AND PRESENT ON REQUEST, DOCUMENTATION NECESSARY TO SUPPORT THIS CERTIFICATE, AND TO INFORM, IN WRITING, ALL PERSONS TO WHOM THIS CERTIFICATE WAS GIVEN OF ANY CHANGES THAT COULD AFFECT THE ACCURACY OR VALIDITY OF THIS CERTIFICATE; • THE GOODS ORIGINATED IN THE TERRITORY OF ONE OR MORE OF THE PARTIES, AND COMPLY WITH THE ORIGIN REQUIREMENTS SPECIFIED FOR THOSE GOODS IN THE NORTH AMERICAN FREE TRADE AGREEMENT, AND UNLESS SPECIFICALLY EXEMPTED IN ARTICLE 411 OR ANNEX 401, THERE HAS BEEN NO FURTHER PRODUCTION OR ANY OTHER OPERATION OUTSIDE THE TERRITORIES OF THE PARTIES; AND • THIS CERTIFICATE CONSISTS OF 1 PAGES, INCLUDING ALL ATTACHMENTS.							
11. AUTHORIZED SIGNATURE: 			COMPANY Reid Supply Company				
NAME CATHY REID			TITLE DATA DOCUMENT CONTROL SUPERVISOR				
DATE (MM/DD/RR) 12/26/12		TELEPHONE 231 777 3951		FAX: 231 773 4485			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO18488

Purchase Order Date 11/23/12

PO Print Date 11/23/12

Page Number 1 of 1

Order From :

VU-REI001

REID TOOL SUPPLY CO.
PO BOX 179
MUSKEGON,, MI 494430179
US

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

800 253 0421

800 438 1145

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

USD

Destination-Collect

Ship To :

DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAKED
11/23/12

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
----------	--	------------------------	----------------------	-----------------------------	-------------	------------	-------------------

1	PNT-9	Lock Pin	11/27/12 Yes	60.00 Each	FedEx PI collect	\$3.8397	\$230.38
---	-------	----------	-----------------	---------------	------------------	----------	----------

Special Inst: AS PER DWG D2711 REV. A
B93657

PO Total:

\$230.38

CERTIFICATE OF CONFORMITY
REQ'D UPON DELIVERY

Change Nbr:

1

Change Date: 11/23/12

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required **YES** NO



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29547**

Purchase Order Date 8/21/2015

PO Print Date 8/24/2015

Page Number 1 of 2

Order From :

VC-ALT01

GROUP ALTECH
2455 HALPERN

ST LAURENT, MONTREAL H4S 1N9

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

Contact Name

Vendor Phone 514-355-3666

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
----------	---	------------------------	--------------------------------------	----	--------------------------------	---------------	-------------------

1	134897	647.7703 STRUT ASSEMBLY	8/31/2015 Yes 8/31/2015		2.00	\$6.86	\$13.72
---	--------	----------------------------	-------------------------------	--	------	--------	---------

Cad Plating is to be done per QQ-P-416F Class I Type II.

PLEASE NOTE: HYDROGEN ENDBRITALEMENT IS INCLUDED IN PRICING PER UNIT

Line Total: \$13.72

2	134113	D2711 LOCK PIN	8/31/2015 Yes 8/31/2015		41.00	\$6.86	\$281.28
---	--------	----------------	-------------------------------	--	-------	--------	----------

Cad Plating is to be done per QQ-P-416F Class I Type II.

PLEASE NOTE: HYDROGEN ENDBRITALEMENT IS INCLUDED IN PRICING PER UNIT

Line Total: \$281.28

Note:

8/24/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29547**

Purchase Order Date 8/21/2015

PO Print Date 8/24/2015

Page Number 2 of 2

Order From :

VC-ALT01

GROUP ALTECH
2455 HALPERN

ST LAURENT, MONTREAL H4S 1N9

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 514-355-3666

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

3	71401-45	PROCUREMENT QUALITY CLAUSES	8/31/2015	1.00	\$0.00	\$0.00
---	----------	--------------------------------	-----------	------	--------	--------

No

Procurement Quality Clauses

8/31/2015

A004 FAA-PMA /TSO

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A024 PROCESS CERTIFICATIONS

A025 CERTIFICATE OF CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

Line Total: \$0.00

PO Total: \$295.00

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 2

Change Date: 8/24/2015

112010 /P



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

24 AUG 2015

PURCHASE ORDER

Purchase Order ID PO29547

Purchase Order Date 8/21/2015

PO Print Date 8/21/2015

Page Number 1 of 2

Order From :

GROUP ALTECH
2455 HALPERN

ST LAURENT, MONTREAL H4S 1N9

VC-ALT01

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 514-355-3666

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	134897	647.7703 STRUT ASSEMBLY	8/31/2015		2.00	\$6.86 9 6.89 ✓	\$13.72
			Yes 8/31/2015				
		FINISH: CAD PLATE IAW MIL-G-4541 CLASS 1A CAD YELLOW PER QQ-P-416F TYPE II					
						Line Total:	\$13.72
2	134113	D2711 LOCK PIN	8/31/2015		41.00	\$6.86 Price in the system 3.78 ✓	\$281.28
			Yes 8/31/2015				
		Cad Plating is to be done per QQ-P-416F Class I Type II.					
						Line Total:	\$281.28

3

HYDROGEN

EMBRIITMENT

CONTRACT REVIEW

- ☐ MANPOWER / TRAINING
☐ MATERIALS / LEAD TIME
☐ EQUIPMENT / CAPABILITIES
☐ QUALITY REQUIREMENTS
☐ RISKS

Q A.

DATE

8/21/2015

Note:

\$120

Order

2981



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29547**

Purchase Order Date 8/21/2015

PO Print Date 8/21/2015

Page Number 1 of 2

Order From :

GROUP ALTECH
2455 HALPERN

ST LAURENT, MONTREAL H4S 1N9

VC-ALT01

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PAID
FEB 2016

Contact Name

Vendor Phone

514-355-3666

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	134897	647.7703 STRUT ASSEMBLY	8/31/2015 Yes 8/31/2015		2.00	\$6.86	\$13.72
FINISH: CAD PLATE 1AW MIL-C-5541 CLASS 1A							
Line Total:							\$13.72
2	134113	D2711 LOCK PIN	8/31/2015 Yes 8/31/2015		41.00	\$6.86	\$281.28
Cad Plating is to be done per QQ-P-416F Class I Type II.							
Line Total:							\$281.28

15/08/15
SK

Note:

8/21/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29547**

Purchase Order Date 8/21/2015
PO Print Date 8/21/2015

Page Number 2 of 2

Order From :

VC-ALT01

Ship To : DART AEROSPACE LTD

GROUP ALTECH
2455 HALPERN

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

ST LAURENT, MONTREAL H4S 1N9

Contact Name

Vendor Phone

514-355-3666

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

3	71401-45	PROCUREMENT QUALITY CLAUSES	8/31/2015	1.00	\$0.00	\$0.00
---	----------	--------------------------------	-----------	------	--------	--------

No

Procurement Quality Clauses

8/31/2015

A004 FAA-PMA /TSO

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A024 PROCESS CERTIFICATIONS

A025 CERTIFICATE OF CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

Line Total: \$0.00

PO Total: \$295.00

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 8/21/2015



2455, Halpern, Saint-Laurent, QUÉBEC, H4S 1N9
Tél: (514) 335-3666
Fax: (514) 335-3868
Internet: www.groupealtech.com

Soumission / Quotation

Soumission / Quote No: **007721**
Date: **23/08/2015**
Par / By: Joe Pelletier

Soumissionné pour / Quoted for

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY
ONTARIO, CANADA
K6A 1K7

Attention de / Attention to:

No. Fax: -
No. Tel: **613-63-2-5200**

Terms / Terms : NET30 Jours/Days

#	NoSerie / Part Number Nom Piece / Part Name	Traitement Process	U/M	Qté/Qty	Prix Price
1	D2711 LOCK PIN	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:3	UNIT	1	3.28
2	647.7701	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:1	UNIT	1	9.99
3	647.7702	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:1	UNIT	1	14.86
4	647.7703	CADMIUM YELLOW PER QQ-P-416F TY:2 CL:1	UNIT	1	6.89
5	LOT	HYDROGEN ENBRITAMENT RELIEF (BAKE)	MIN-CH	1	120.00

Notes Additionnelles / Additional Notes

MIN CHARGES :
\$175.00 FOR CADMIUM
\$120.00 FOR HYDROEMBRIEMENT RELIEF (BAKE)

Soumission par / Quotation by
Joe Pelletier

Représentant Technique / Technical Representative

Prix en devise Canadienne - Prices are in Canadian Funds * Validation: 30 Jours / Days
TPS / TVA non incluse - GST / PST not included